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Please read and understand the manual before operation

注意事项



Warning

- This manual is an important part of the product. Please read and understand it thoroughly.

- Keep the manual for future use in inspection and maintenance.
- Do not use the product for any other purposes.
- The manufacturer is not responsible for any damage caused by improper use or uses other than the designed purpose.

Precautions

- Only well-trained personnel can operate the lift. Any changes to the components or use for other purpose without the consent of the manufacturer may cause direct or indirect damage to the product.
- Do not expose the lift to extreme temperature or humidity. Keep it away from heating device, faucet, humidifier or furnace.
- Do not install the lift outdoors or expose it to rain. If it is really necessary to do so, a special order should be made from the manufacturer.
- Keep the lift away from the dust, ammonia, alcohol, thinner and spray adhesive.
- Keep away from the lift when it is in operation.
- Inspection of the lift should be carried out regularly. Do not operate a damaged lift or a lift with broken parts. All the parts are only

replaceable with the parts provided by the manufacturer.

- Do not overload the lift. The maximum lifting weight is clearly marked on the nameplate.
- Do not operate the lift when there are personnel in the vehicle.
- Keep the lifting area clear of obstacle, grease, oil, garbage and other substances.
- Use the lifting point recommended by the auto manufacturer. Keep the support in close contact with the vehicle.
- Use appropriate tools and safety protection equipments such as overall and working boots.
- Pay special attention to the safety labels on the control desk.
- Keep hands and other body parts away from the moving parts of a lift in operation.
- Do not remove or override safety protection of the lift.
- Hydraulic oil for the lift is N32 or N46 mechanical oil. Pay attention to the safe data as described in this manual.
- For the sake of technical improvements, Launch (Shanghai) Machinery Co., Ltd reserves the right to change the specifications without prior notice

Caution labeling exemplify

(1) Read operating and safety manuals before using lift!



(2) Proper maintenance and inspection is necessary for safe operation!



(3) Don not operate a damaged lift !



(4) Lift can be used by trained operators ONLY!



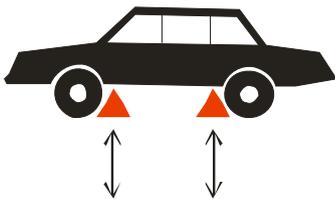
(5) only Authorized personnel can be in the lift area!



(10) the central of gravity should be between two arms!



(6) use LAUNCH commend lifting points!



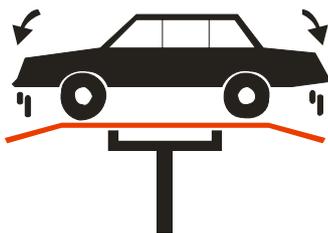
(11) keep the area clean!

(7) use bracket to help disassembly or installation!



(12) do not shake the vehicle!

(8) Auxiliary adapters would reduce load capacity!



(13) do not lift single side of vehicle!

(9) keep area clear!



(14) keep feet clear when lowering!



(15) When lifting or lowering, don't stand under the lift!



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1 General Information

1.1 Application

This lift is designed for the purpose of lifting light vehicles under 3.2 tons for vehicle test, service and cleaning.

1.2 Features

- The lift features advanced design, durability, compact layout.
- Surface installation and saving space. Drive on height less than 110mm, suitable for lower profile cars
- Hydraulic system keeps both platforms level.
- Mechanical protection device throughout the travel distance.
- Automatic height limiting device.
- Automatic lubricating system and oil-less bearings.

1.3 Specifications

Electric specifications:

Motor (Optional): 2.2kw

Voltage options:

Single-phase/3-phase 110v/220v 60Hz

Single-phase/3-phase 220v/380v 50Hz

Noise

Noise: ≤ 70 dB (A)

Hydraulic System

Max. Working Pressure: 28 MPa, Flow rate: ≥ 4.5 L/min.

Working Pressure: 5 kgf/cm²

Pneumatic System

Working Pressure: 5 kg/cm²

! Notice: At the bottom position, the max load of the lift is 1T.

Max. Lifting Weight (kg) (lb)	3200(6614)
Max. Lifting Height (mm) (")	1990(78.3)
Lifting Time (sec)	≤ 60
Lowering Time (sec)	≥ 20
Power (kw)	2.2
Number of Platforms	2
Platform Size (mm) (")	1460×2060×620 (54.5×81.1×24.4)
Overall Weight (kg)(lb)	820(1804)
Synchronization Precision (mm) (")	$\leq 40(1.6)$
Height difference (mm)	$\leq 8(0.3)$

1.4 Environment requirements

Temperature: 0°C ~ +40°C

Relative Humidity: $\leq 80\%$ at 30°C

Transportation/Storage Temperature: -25°C ~ +55°C

Altitude: ≤ 2000 m(78740")

2 Structure

2.1 Layout

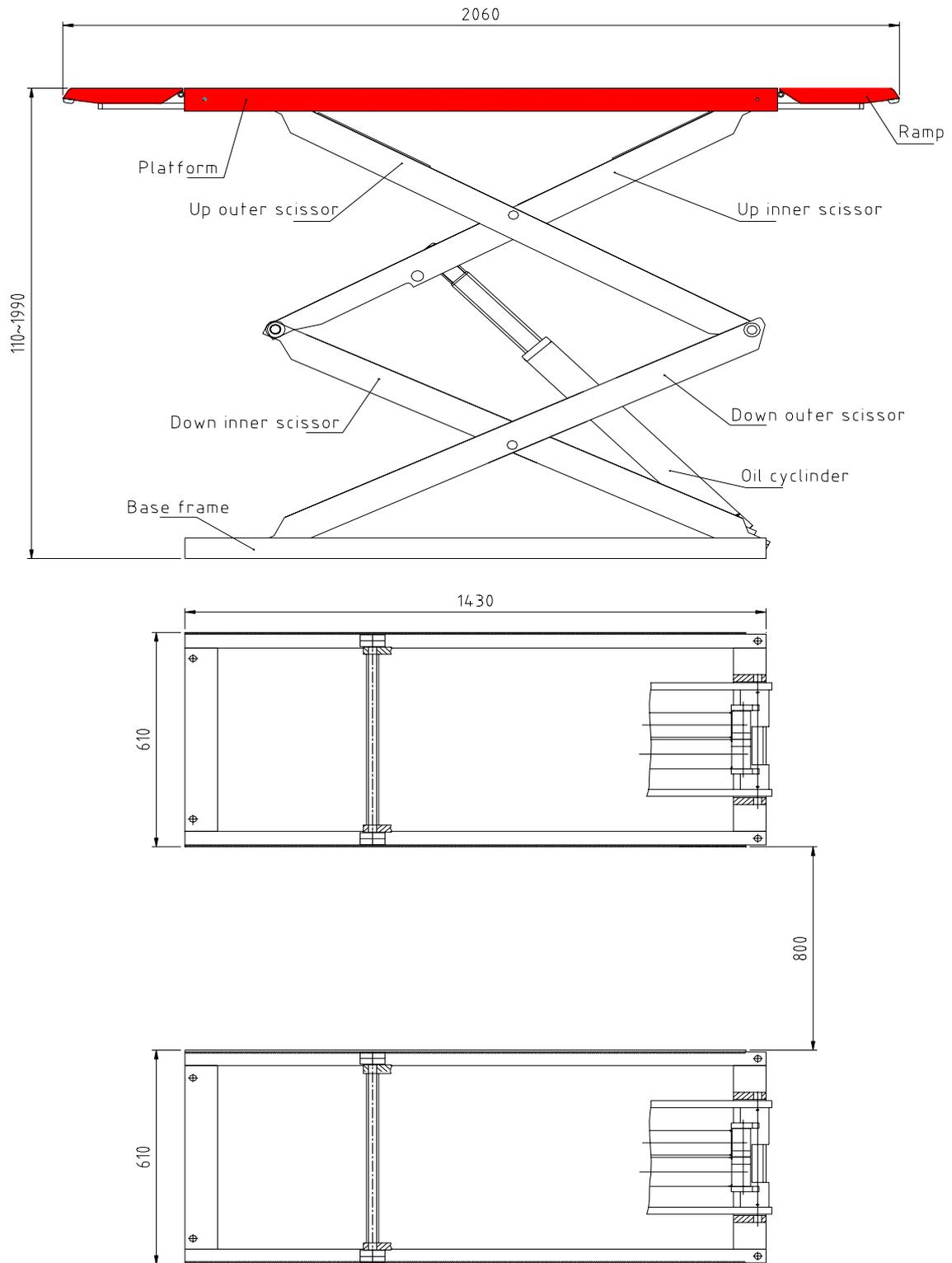


Fig.1

2.2 Electrical Diagram

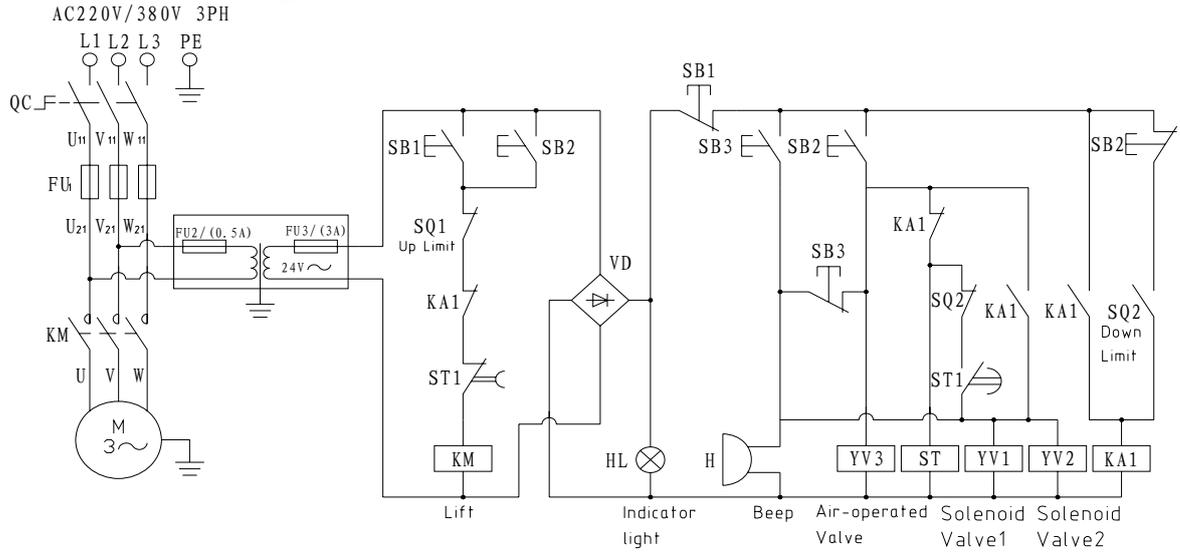


Fig.2

2.3 Hydraulic Diagram

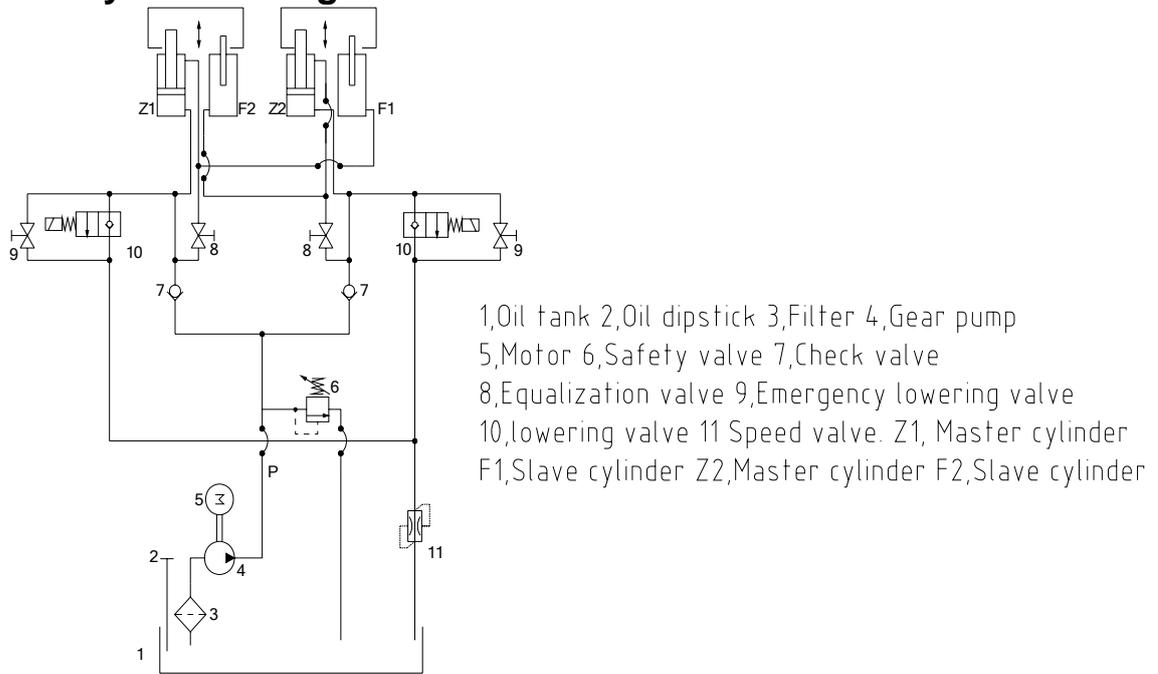


Fig.3

2.4 Pneumatic Diagram

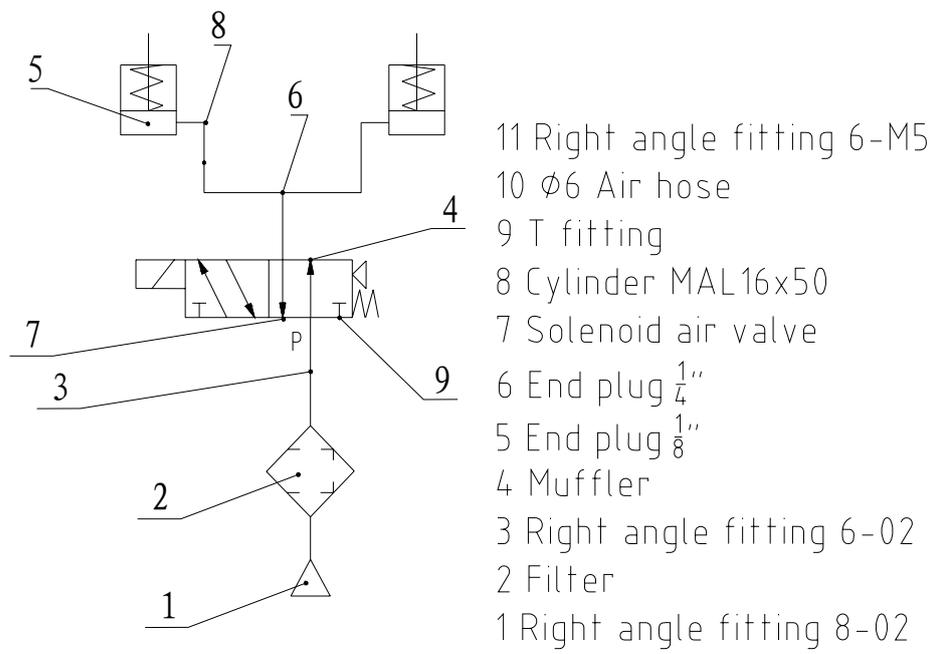
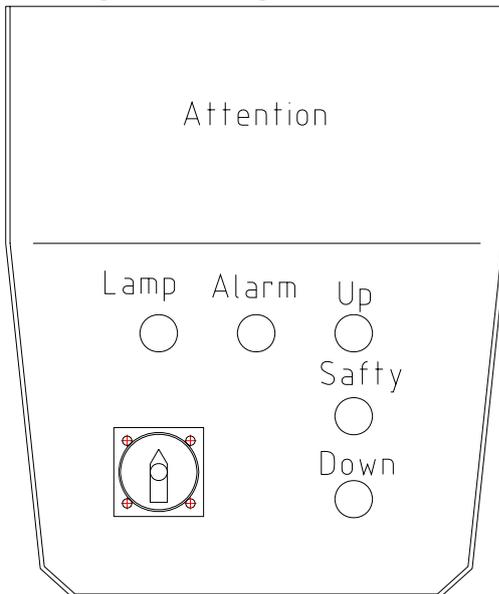


Fig.4

3 Operation

3.1 Operation panel



Operation Instruction

Lifting process: Press UP button SB1, The motor will drive the pump and send oil to the cylinder, which will in turn raise the platform upward. Release button SB1, the platform will stop raise. Keep pushing button SB1, when the platform is at the Max. height, release valve will be activated and protect the lift.

Locking process: press LOCK button SB3, solenoid valve YV1, YV2 will be engaged, the safety system is locked.

Lowering process: Press UP button SB1, platform raise a little, safety claw is unlocked, then press DOWN button SB2, solenoid valve YV1, YV2, YV3 will be engaged, the platform begin to lower. In the mesa distance base about 440 mm in height, lifting machine in decline process will automatically stop once. Lifting machine automatic stop after that, according to need to drop button lifting machine can drop exactly.

3.2 Preparatory Inspections

- Check for the synchronized and steady movement of the platforms.
- Check the sensibility and reliability of safety

ratchet.

- Make sure the platforms would automatically stop when they reach the max lifting height.
- Check for possible leakage in the cylinder, hoses and fittings.
- Check for possible air leakage in the solenoid valve, cylinder, pressure regulator valve and fittings.
- Check for any abnormal action and sound in pump and motor.
- Check if the Emergency Stop button works properly.

3.3 Operational Procedures

- Keep speed below 5km/h when driving on the platforms.
- Stop the vehicle when the platforms are between its front and rear wheels.
- Place rubber pads on the platforms where the lifting points will contact and press UP button to lift the vehicle to 200mm~300mm (9 to 12 inches) from the floor.
- Make sure that the two platforms are leveled and nothing unusual is found.
- Keep pressing UP button until the vehicle rises to the required height.
- Press SAFETY LOCK button to lower the lift and engage the safety ratchet so that the platforms are leveled with one another.
- After the maintenance is done, keep the work area clear and safe before lowering lift.

3.4 Safety Precautions

- The hydraulic relief valves are well-adjusted before leaving factory. The manufacturer will not be responsible for any damage caused by unauthorized adjustment.
- Check the safety lock ratchets are engaged before going about any under-car jobs.
- Place rubber pads on the platforms and spread them for maximal support.
- In case of any leakage in the hydraulic system, fix the problem and refill the oil to the proper level.
- In the mesa distance base about 440 mm in height, lifting machine in decline

process will automatically stop once. This phenomenon is not lifting machine fault.

4 Troubleshooting

Symptoms	Reasons	Solutions
The motor does not work.	Thermo relay or circuit breaker actuated Voltage is not correct. Fuse burning. Motor is broken.	Reset the thermo relay or circuit breaker Supply power of correct voltage. Change Fuse. Change motor.
The motor works, but the platforms do not move.	The motor rotates in the wrong direction. Oil level is too low. Oil leak.	Change wiring of motor to change direction. Add oil. Check the oil hose.
The motor works, but the platforms can not lift the vehicle.	The voltage to the motor is too low. Pressure of relief valve is not right. The lift is overloaded The hydraulic pump is damaged.	Supply motor with correct voltage. Adjust the pressure of relief valve. Check the weight of the vehicle. Replace the hydraulic pump.
Lowering speed is slow.	There is foreign substance in the lowering solenoid valve. Lowering speed valve is turned too low.	Clean the lowering solenoid valve. Turn the lowering speed valve up.
The platforms are not synchronized.	One cylinder has much more oil than another.	Adjust the oil in both cylinders according to manual.
Lifting speed is slow or oil spill.	Oil and air are mixed.	Change oil or eject air.

5 Maintenance

5.1 Daily Maintenance

- Keep the lift clean. Make sure power is cut off before cleaning the lift.
- Keep the working area clean. Excessive dust in the work area will shorten the lifespan of the lift.
- Before operation, inspect and keep all the safety devices of lift in order. If any problems are found, adjust, maintain or replace the parts timely.
- Make sure that the pits are kept dry and clean.
- Inspect if there is leakage in the air valve and if it is well-lubricated.

5.2 Monthly Maintenance

- Refasten the anchor bolts.
- Check all the hoses and fittings for possible wearing and leakage. If any leakage is found to be caused by worn sealing parts, replace with

parts meeting the specifications.

- Check if the moving parts are well-lubricated with high-quality #2 lithium lubricant.
- Apply #2 lithium lubricant on a monthly basis.

5.3 Biannual Maintenance

- Check all the moving parts for possible wearing, interference and damage.
- Inspect the lubrication of all the rollers. If the roller is dragged along in lifting or lowering, apply lubricant to the roller shaft.
- At the end of the first six months, clean the hydraulic system and replace the hydraulic oil. Replace the hydraulic oil with N32 hydraulic oil in winter and N46 in summer.

5.4 Maintenance for 3 Years or 5000 Times Operations

- Replace the bushings at all joints.
- Replace all seals
- Replace sliding blocks.

6 Storage and Scrapping

6.1 Storage

When the lift needs to be stored for a long time:

- Unplug from power socket.
- Lubricate all the parts, including all the contact surface of the rollers.
- Bleed oil from tanks.
- Cover the lift with plastic hood.

6.2 Scrapping

When the lift has exceeded its lifespan and can not be used any more, disconnect it from the electrical supply and dispose of as required by the local regulations.

Hydraulic Oil Data

#2 Lithium Lubricant

Item	Specifications
Conical degree (1/10mm)	278
Dropping point °C	185
Erosion (T2 Copper Plate, 100 °C, 24h)	No Change
Copper Screening (100 °C, 22h) %	4
Evaporation (100 °C, 22h) %	2
Oxidizing Stability (99 °C, 100 h)	0.2
Non-corrosibility (52 °C, 48)	Grade 1
Foreign substance (Microscopic method) / (number/cm ³)	
Above 10µm	No more than 5000
Above 25µm	No more than 3000
Above 75µm	No more than 500
Above 125µm	0
Relative Viscosity (-15 °C, 10s ⁻¹) ,/(Pa·s)	< 800
Humidity Loss (38 °C, 1h) (%)	≤8

N32 Mechanic Oil (for winter)

Item	Specifications
Moving Viscosity 40 °C	28.8~35
Pour / °C	≤-15
Flash point / °C	≥175

N46 Mechanical Oil (for summer)

Item	Specifications
Moving Viscosity 40 °C	41.4~50.6
Pour / °C	≤-9
Flash point / °C	≥185